



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,721	10/18/2004	Roland Isherwood	66307-322-7	2525
25269 7590 03/20/2008 DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005				
EXAMINER				
DICUS, TAMRA				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
03/20/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,721

Applicant(s)

ISHERWOOD ET AL.

Examiner

TAMRA L. DICUS

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10-18-04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The drawing objection over claim 19 is withdrawn due to Applicant's amendments.
2. The 112 rejections except for where noted below are withdrawn due to Applicant's amendments.
3. The Double Patenting rejection is withdrawn due to Applicant's Terminal Disclaimer submission.
4. The prior art rejections are adjusted to address the new limitations, see below.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show The reflection enhancing layer may be metal, as shown in FIGS. 28 to 31, or an HRI layer, as shown in FIGS. 32 to 34 as described in the specification (see Examples 9-10 of the instant specification describing the aforementioned elements, but not including the reference numbers of the reflection enhancing layer or the HRI layer). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- Applicants amendments have not addressed the above requirements, namely because the Examples 9-10 still state a showing of the HRI layer, but the HRI layer is not shown in the recited Figures. See page 15 of Applicant's instant specification stating:

Figures 28 to 31 show alternative constructions for the optically variable device utilizing a metallic reflection enhancing layer. Figures 32 to 34 show alternative constructions for utilizing the HRI reflection enhancing layer. This description and the recited Figures do not match.

- Applicant alleges that the reflection-enhancing layer and HRI layer are unnumbered, but are produced from metallized and unmetallized layers 3 and 4. However, throughout the specification, they are separate and different elements and thus should be referenced as so. The recent amendment attempted to change other examples, but not the ones pointed out by the Examiner.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

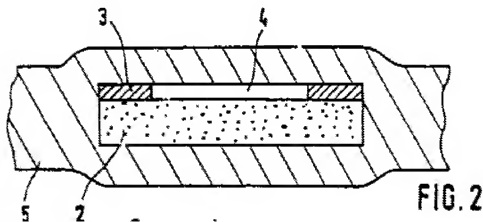
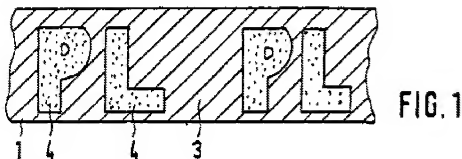
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-6, 9-16 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6474695 to Schneider et al. in view of US 6,808,806 to Phillips et al.

Schneider et al. teaches a security document or thread embedded in paper (3:45-68), shown in Fig. 1, an inherently transparent substrate of polyester, 1 FIG. 1, and 2, FIG. 2 and associated text, on paper support 5, FIGS. 1 and 2, including metal 3, FIGS. 1 and 2, and metal

Art Unit: 1794

free areas of indicia 4, FIGS. 1 and 2. To instant claims 12 and 16-17, see 3:20-41, printing luminescent colors (embraces second printed indicia, see also 4:1-5, 4:49-68, 6:1-5) in mixed or overlapping fashion and embossed holograms in the carrier or another layer such as metal (the print and holograms are equivalent to optically variable indicia and device as claimed). Instant claims 1-2, 5, 10-13, 16-17, and 21-22 are addressed.



Schneider does not teach a transparent magnetic layer comprising flake particles as claimed per instant claim 1, 3-5, 9, 11, and 13-16 or the transparent polymer of instant claim 6.

Phillips teaches a transparent magnetizable coating layer (1:5-11, Abstract) in liquid form deposited generally on substrate surfaces (5:57, per instant claims 1, 3-5) where a specific

substrate is a metal surface (6:60-62) or a transparent polymer carrier (7:22-40, per instant claim 6), where a reflective magnetic flake (RMF) 100 (Fig. 2 and associated text) is in the magnetizable pigment coating (see, 26, FIG. 1 and associated text, 7:40-51, 7:55-62) and is comprised of magnets such as Ni and soft ones (9:54-10:45), wherein one of the properties of the soft magnets in the magnetizable coating is transparency because it is deposited as an absorber in a thickness that does not remain opaque (equivalent to a clear transparent magnetic layer remaining transparent and clear, see 10:1-10) overall yielding a three-dimensional effect (col. 6). Other properties include very low coercive fields having a low coercivity of less than 100 oersteds (10:10-40, teaching a range of 0.05-300 Oersteds, falling within applicant's range) and a remanence of a level detectable on a head (inherently present because the same material is employed), of a size and distributed in a concentration (7:55-65). The absence of an applied magnetic field is also taught by Phillips at 10:30-35 and use of soft magnetic materials (10:33). While Phillips does not identify Ni having the aforesaid properties, because the same material is employed, it inherently has the claimed characteristics (little or no magnetic remanence in absence of an applied magnetic field and a remanence of a level detectable on a machine). Phillips also teaches covert magnetic signatures in a printed magnetic image (equivalent to indicia, 6:45-50). The image is on the carrier is between a magnetizable coating and substrate (24 above and on 22, FIG. 1 and preprinted on the carrier – 7:30-35, per instant claim 4). The RMF is further surrounded by high refractive index dielectric materials (11:14-40, shown in FIG. 3, per instant claim 9). To instant claims 13-15, Fig. 4 (8 is under 4) and Example 5 (ink is printed on a film and metal and ethyl alcohol treatment is introduced) of Schneider teach indicia

Art Unit: 1794

overlying and within metallic and demetallized regions. See also Table 1. Instant Claims 1, 3-5, 9, 11, and 13-16 are addressed.

It would have been obvious to one having ordinary skill in the art to have modified the security of Schneider to incorporate the transparent polymer layer and magnetizable coating comprising pigment flakes in the orders as claimed and as taught by Phillips because Phillips teaches a three-dimensional effect, very low coercive fields, and remanence properties to any substrate to provide security features thereby producing security substrates as cited above, the transparent polymer layer is used to carry the indicia and magnetizable layer as cite above.

- Applicants argue that while Phillips teaches the magnetic layer that Schneider lacks, the magnetic ink particles are oriented prior to ink curing to provide novel and interesting visual effects. However, there has not been evidence submitted to this argument. Additionally, what happens prior or after is of no matter as the claims are product, not process claims. Applicant's allege that the magnetic materials are not clear and don't have the remanence values and thus do not disclose a flake nickel magnetic material. However, this is not a convincing argument because Applicant's argument cannot take the place of evidence and Applicant does not claim clear or transparent magnetic materials, but a clear transparent magnetic layer, which is taught as set forth above. Also, Phillips explicitly teaches the same remanence and coercivity values in overlapping ranges as Applicant, and thus any properties therefrom are inherent. See again, 9:53-10:45 of Phillips describing the above and that the magnetic material, including

nickel, is deposited so that it is not substantially opaque, which means it's essentially clear and transparent.

- A *prima facie* case has been established, and therefore the burden shifts to the Applicant to submit additional objective evidence of nonobviousness, such as comparative test data showing that the claimed invention possesses improved properties not expected by the prior art. Arguments of counsel cannot take the place of factually supported objective evidence. See, e.g., *In re Huang*, 100 F.3d 135,139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); *In re De Blauwe*, 736 F.2d 699,705, 222 USPQ 191, 196 (Fed. Cir. 1984). Until the Applicant has convincingly argued or has provided evidence to the contrary, the rejections are maintained.
- Applicant has made no arguments to the specific references in the reiterated rejections below, and thus, the rejections stand for reasons of record:

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6474695 to Schneider et al. in view of US 6,808,806 to Phillips et al. and further in view of US 5,997,849 to Small et al.

The combination is relied upon above.

The combination does not teach a varnish as per instant claim 2, but Phillips does generally teach the magnetic image comprising the flakes can be dispersed in an ink vehicle, where such dispersion does not interfering with the magnetism of magnetic pigments (7:20-55).

Small teaches an ink for use in security documents (Abstract, patented claim 16) and explains it is known that ink vehicles have a main ingredient, called the binder, which can be a resin, lacquer or varnish or some other polymer (2:15-25) and teaches at 9:25-40 pigments in flake form mixed with a varnish which exhibits high tack and viscosity.

It would have been obvious to one having ordinary skill in the art to have modified the been obvious to have modified the combination to incorporate or use a transparent ink or varnish vehicle to produce a clear magnetic layer as claimed because Phillips suggests a general suitable vehicle for the flake pigment and Small teaches a varnish vehicle in order to bind the pigments and to yield a high tack and viscosity as cited above.

9. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6474695 to Schneider et al. in view of US 6,808,806 to Phillips et al. and further in view of EP 319157A to MELLING et al.

The combination is relied upon above.

The combination does not teach an adhesive layer as per instant claims 7-8.

Melling teaches a security with a layer of metal on one or both sides of a substrate, there being present on one side of the device a continuous metal path along its length, and metal-free (non opaque) portions providing a repeating pattern, design, indicia or the like being adhered by an adhesive via laminate of said security to polymer webs or sheets (abstract, page 8, lines 33-35).

It would have been obvious to one having ordinary skill in the art to have modified the combination to include an adhesive layer as claimed because Melling teaches it is conventional

to apply adhesive to laminate a device or thread to produce a final laminate. Further it was obvious to include adhesive overlying indicia because the indicia is on the surface of a carrier and in combination with Melling's adhesive layer, produces the structured order of instant claim 8.

10. Claims 17-18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6474695 to Schneider et al. in view of US 6,808,806 to Phillips et al. and further in view of US 6294241 to Kaule et al.

The combination is relied upon above.

The combination does not teach a lacquer as per instant claims 17-18, 20, while Schneider teaches an embossed hologram as aforementioned.

Kaule teaches a security having embossed holographic structures in a lacquer on a plastic layer (Abstract) because the lacquered hologram adheres well and provides a cost-effective and simple way to provide a security document with an embossed hologram (2:35-68).

It would have been obvious to one having ordinary skill in the art to have modified the combination to provide a lacquer on a polymer layer, be it a carrier or magnetic layer as claimed because Kaule teaches the advantages of a cost-effective and simple way to provide a security document with an embossed hologram (Abstract, 2:35-68, col. 4 of Kaule). Thus, in combination, the ordered structure as instantly claimed would be obvious to provide because the lacquer adheres to polymeric materials.

11. Claims 17-18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6474695 to Schneider et al. in view of US 6,808,806 to Phillips et al. and further in view of US 6726813 to Kaule et al.

The combination is relied upon above.

The combination does not teach a lacquer as per instant claims 17-18, 20, while Schneider teaches an embossed hologram as aforementioned.

Kaule teaches a security having embossed holographic structures in a lacquer on a plastic layer (2:20-30, 2:55-68, 3:1-10) having an auxiliary layer 53, FIG. 4b under metal 54 and adjacent metal free area 56 on embossed plastic 52 all shown in FIG. 4b as a partial metallization by etching which structure aids in protection against falsification in a security document (1:1-25).

It would have been obvious to one having ordinary skill in the art to have modified the combination to provide a lacquer on a polymer layer, be it a carrier or magnetic layer as claimed because Kaule teaches the advantages of protection against falsification in a security document (1:1-25, 2:20-30, 2:55-68, 3:1-10 of Kaule). Thus, in combination, the ordered structure as instantly claimed would be obvious to provide.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1794

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMRA L. DICUS whose telephone number is (571)272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamra L. Dicus /TLD/
Examiner
Art Unit 1794

March 8, 2008

/Terrel Morris/
Supervisory Patent Examiner
Group Art Unit 1794